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3
Selected References on Information Storage and Retrieval*

Notes on IS&R and Related Developments. References on mechanical translation are included in this list because this subject is closely related to the automation of abstracting and similar types of textual analysis which are important phases of information storage and retrieval.

Many devices and systems have been developed which will find (retrieve) information with notable speed and accuracy, after the laborious input steps of abstracting, indexing and coding have been performed. Automation of input is being given increasing attention as indicated by the references dealing with automatic indexing and abstracting. Perhaps the latest approach to facilitating the input stage is the development of automatic techniques and devices for direct transcription of data from typed or printed form to machine-useable forms, a development that holds promise for application in mechanized literature searching. Thus, considerable current effort is being expended on "reading machines" and devices for "character" and "pattern" recognition. For further information on these developments see:

NSF-60-65 (Reported under National Science Foundation in Part II of the following list) pp. 93-105.

Part I Books

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Perry, J. W. and Kent, Allen Tools for machine literature searching: semantic code dictionary, equipment, procedures. 972 p. (243.8 L6193 v.1) New York. Interscience Publishers, Inc. 1958.

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Vol. 1, 1953, 110 p., Vol. 2, 1954, 111 p., Vol. 3, 1956, 165 p.
Vol. 4, 1957, 129 p. (The mechanization of data retrieval)
Vol. 5, 1959, 178 p. (Emerging solutions for mechanizing the storage and retrieval of information.)

* Numbered footnotes given on page 5.

Note: For all references available in USDA Library the library call number is given thus: (243.2 v66)

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Part II Articles, Papers and Reports

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Baxendale, P. An empirical model for machine indexing. Paper presented at the 3rd Institute on Information Storage and Retrieval. Wash., D.C. Feb. 1961. 10 p. 5/

Bello, Francis How to cope with information. Fortune Magazine, Sept. 1960. 1/ and 3/

Bohnert, L. Two methods of organizing technical information for search. (332.8 Am34) American Documentation. July 1955.

Brownson, Helen L. Research on handling scientific information. Science. Dec. 30, 1960. (470 SCi2)

Bush, Vannevar As we may think. Atlantic Monthly. July 1945. p. 101. (110 AT6)

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Firth, F. E. An experiment in literature searching. IBM Research Lab. San Jose, Calif. Sept. 1958. 22 p. 1/

Int'l. Business Machines - General information manual - An Introduction to machine retrieval. 1960. 16 p. 1/ and 3/

Jonker, Fred'k. The descriptive continuum, a generalized theory of indexing. Preprints of papers for the International Conference on Scientific Information, Wash., D.C. 1958. Area 6 p. 21.

Kent, Allen The information center of tomorrow. Paper 58-MD-13. Am. Soc. of Mech. Eng., 29 W. 39th St., New York 18, N.Y.

Kent, Allen Exploitation of recorded information. I - Development of an operational machine searching service for the literature of metallurgy and allied subjects. American Documentation Vol. 11, No. 2. 1960. (332.8 AM34)

Ledley, Robert S. Tabledex: A new coordinate indexing method for bound book form bibliographies. Preprints of papers for the International Conference on Scientific Information. Wash., D.C. 1958. Area 5 p. 395. 1/ and 4/

Ledley, Robert S. Digital electronic computers in biomedical science. Science. Nov. 6, 1959. (470 SCi2)

Ledley, Robert S. and Lusted, Lee B. Reasoning foundations of medical diagnosis. Science. July 3, 1959. (470 SCi2)

Luhn, H. P. Auto-encoding of documents for information retrieval systems. 7 p. IBM Res. Center, Yorktown Hgts., N.Y. 1958. 1/

Luhn, H. P. The automatic creation of literature abstracts. 11 p. IBM Journal of Research & Development. April 1958. 1/

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- Savage, T.R. The preparation of automatic abstracts on the IBM 704 data processing system. IBM Research Center, Yorktown Heights, N. Y. 1958. 11 p. 1/
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- Kraleovich, B. Bibliography on machine translation. Jan. 14, 1960. Report C72-001. The Ramo-Wooldridge Corp., Los Angeles, Calif. 1/
- Loftus, H. Automation in the library, an annotated bibliography. (332.8 AM34) American Documentation. April 1956.

Footnotes

- 1/ Copy available for inspection in Central Project Office (either now or in near future).
- 2/ Copies may be obtained from Armed Services Technical Information Agency (ASTIA), Air Research and Development Command, U. S. Air Force, Arlington Hall Station, Arlington 12, Va.
- 3/ Excellent, comprehensive surveys of the current situation in information storage and retrieval.
- 4/ Same article also contained in: Proceedings, International Conference on Scientific Information. 1958. 2 vols. National Res. Council. 1959. (330.9 In83)
- 5/ Copies available for inspection in SESD-ARS (Dr. H. A. Dunn).



